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I claim:

1. A process for making a hose comprising the steps of:

pressurizing an extruded rubber hose;

trapping air inside said hose; and,

vulcanizing said hose from the outside to the inside.

2. A process for making hose as claimed in claim 1 wherein said hose includes a woven jacket.

3. A process for making hose as claimed in claim 1 wherein said step of trapping air inside said hose is performed by the sealing engagement of the hose with a mandrel and by the sealing engagement of the hose with pinch rollers.

4. A process for making hose as claimed in claim 1 wherein said step of vulcanizing said hose from the outside to the inside includes initially vulcanizing the hose with a first energy source followed by vulcanizing the hose with a steam heater.

5. A process for making hose as claimed in claim 4 wherein said first energy source is a microwave heater.

6. A process for making hose as claimed in claim 4 wherein said first energy source is an electric heating coil.

7. A process for making hose as claimed in claim 4 wherein said first energy source is a hot air heater.

8. A process for making hose as claimed in claim 4 wherein said first energy

source is an infrared heater.

9. A process for making hose as claimed in claim 1 wherein said step of pressurizing extruded rubber hose includes supplying air to and through a check valve in a mandrel and into a cavity formed by said check valve, said mandrel, said hose and pinch rollers.

10. A hose made according to the process of claim 1.

11. A process for making an extruded rubber hose comprising the steps of:

extruding rubber hose over a mandrel such that said rubber hose forms a seal as said hose exits said mandrel;

tensioning and sealing said rubber hose as it is drawn through pinch rollers by a haul-off; and

vulcanizing said hose intermediate said mandrel and said pinch rollers.

12. A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanization occurs at a temperature of between 220°F - 350°F.

13. A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanizing is performed by a steam drum.

14. A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanizing is performed by an infrared heater.

15. A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanizing is performed by a microwave heater.

16. A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanizing is performed by electric heating coils.

17. A process for making hose comprising the steps of:

extruding rubber onto, into and through a woven fabric forming an unvulcanized rubber hose;

pressurizing said unvulcanized rubber hose with a gas;

sealing the inside of said rubber hose with respect to a mandrel;

pulling the unvulcanized rubber hose through a heater vulcanizing said rubber hose; and,

pinching and sealing said vulcanized hose as it is removed from said heater.

18. A process for making hose as claimed in claim 17 wherein the step of pressurizing said unvulcanized rubber hose with a gas includes intermittently supplying gas under pressure through a gas supply cup to said inside of said rubber hose.

19. A process for making hose as claimed in claim 18 wherein the step of pressurizing said unvulcanized rubber hose includes intermittently supplying gas under pressure through a gas supply cup, into and through a tube interconnected with said mandrel, and into and through a check valve and into said inside of said rubber hose.

20. A process for making hose as claimed in claim 19 further comprising the step of measuring the outside diameter of the vulcanized rubber hose and varying the frequency of said intermittent supply of gas to said inside of said rubber hose in response

to said measurement of outside diameter of said hose.

21. A hose made according to the process of claim 17.

22. A hose made according to the process of claim 18.

23. A hose made according to the process of claim 19.

24. A hose made according to the process of claim 20.

25. A process for making hose comprising the steps of:

feeding woven cloth over a tube and a mandrel;

supplying gas through said woven cloth, into said tube, and through said mandrel;

extruding rubber onto, into and through a woven fabric forming an unvulcanized rubber hose;

pressurizing said unvulcanized rubber hose with said gas;

sealing the inside of said hose with respect to said mandrel;

pulling said unvulcanized rubber hose through a heater vulcanizing said rubber hose; and,

sealing said rubber hose as it is removed from said heater.

26. A process for making hose as claimed in claim 25 further comprising the step of measuring the outside diameter of said hose upon exit from said heater.

27. A process for making hose as claimed in claim 26 wherein said step of supplying gas through said woven cloth and into said tube is performed intermittently at a frequency necessary to insure the correct diametrical dimensions of said hose.

28. A process for making hose as claimed in claim 27 wherein said frequency of supplying air through said woven jacket is increased when said outside diameter is too small and said frequency of supply air is decreased when said outside diameter is too large.

29. A process for making hose as claimed in claim 26 wherein a check valve is included in said mandrel and pinch rollers seal said unvulcanized hose as it is removed from said heater.

30. A process as claimed in claim 26 wherein said heater may be selected from the group consisting of a steam heater, an infrared heater, an electric coil, a hot air heater or a microwave heater.

31. A hose made according to the process of claim 25.

32. A process for continuously vulcanizing hose comprising the steps of:

pressurizing said hose from within; and,

vulcanizing said hose from outside-in.

33. A process for continuously vulcanizing hose as claimed in claim 32 wherein said step of pressurizing said hose includes supplying gas under pressure through a check valve located in a mandrel.

34. A process for continuously vulcanizing hose as claimed in claim 33 wherein said step of pressurizing said hose includes sealing said hose about said mandrel and between pinch rollers.

35. A process for continuously vulcanizing hose as claimed in claim 32 wherein said step of vulcanizing said hose from outside-in is performed by a heater selected from the group of a steam heater, an electric coil, a radiant heater, an infrared heater, a hot air heater or a microwave heater.

36. A process for continuously vulcanizing hose as claimed in claim 32 further comprising the steps of controlling the diameter of said hose.

37. A hose made according to the process of claim 32.

38. A process for endlessly vulcanizing hose comprising the steps of:

pressurizing said hose from within; and,

vulcanizing said hose from outside-in.

39. A process for endlessly vulcanizing hose as claimed in claim 38 wherein the step of vulcanizing said hose from outside-in is performed by a non-contact heater.

40. A process for endlessly vulcanizing hose as claimed in claim 38 wherein said step of vulcanizing said hose from outside-in is performed by a heater spaced apart from said hose.

41. A process for endlessly vulcanizing hose as claimed in claim 38 wherein said step of vulcanizing said hose from outside-in occurs for 1 to 5 minutes.

42. A process for endlessly vulcanizing hose as claimed in claim 41 wherein said step of vulcanizing said hose from outside-in occurs at a temperature in the range of 220-350°F.

43. An apparatus for making hose comprising: a gas supply cup; a tube interconnected to a mandrel; a woven fabric being movable over said tube and said mandrel; said mandrel and a die extrude rubber onto, into and through said woven fabric forming a hose having an interior and an exterior; a check valve affixed to said mandrel and being in communication with said tube; said gas supply cup intermittently engaging said woven fabric and supplying air through said woven fabric, into said tube, through said check valve and into said interior of said hose; and, pinch rollers pinching said hose.

44. An apparatus as claimed in claim 43 further comprising:

a heater surrounding but not touching said formed hose.

45. An apparatus as claimed in claim 43 wherein said heater is selected from the group consisting of a hot air blower, a radiant heater, or a microwave heater.

46. An apparatus for making hose comprising: a gas supply cup interconnected with a gas supply; a tube interconnected to a mandrel; a lead-in cone affixed to said tube; a woven fabric being movable over said lead-in cone, said tube and said mandrel; a die for extruding rubber onto, into and through said woven fabric forming a hose; a check valve affixed to said mandrel and being in communication with said tube; said gas supply cup intermittently engaging said woven fabric supplying air through said woven fabric, into said lead-in cone, through said check valve and into said interior of said hose.

47. An apparatus for supplying gas to the interior of an elastomeric hose having a woven fabric support as it is continuously pulled out of a die comprising: a gas supply

cup interconnected with a gas supply; a tube interconnected to a mandrel; a lead-in cone affixed to said tube; each of said gas supply cup and said cone includes a passageway therethrough; a check valve affixed to said tube; said gas supply cup intermittently engaging said woven fabric supplying air through said woven fabric, into said lead-in cone, through said check valve and into said interior of said hose.